CLAIMS:

1.   A device comprising an array (1, 11, 21, 31a, 31b) of electronic field elements (F_{ij}), said array consisting of rows (i) and columns (j) in the form of a matrix, wherein

a)   each field element (F_{ij}) is connected to precisely one access line (A_l, D_k) among a set of several access lines, and

5   b)   each access line (A_l, D_k) runs in zigzag fashion along diagonals of the array (1, 11, 21, 31a, 31b) from border column to border column and at each turning point connects two field elements (F_{ij}, $F_{(i-1)j}$) from the same border column and two successive rows.

2.   A device as claimed in claim 1, characterized in that

10   c)   each field element (F_{ij}) is connected to precisely one secondary line (D_k) among a set of several secondary lines,

d)   each secondary line (D_k) runs in zigzag fashion along diagonals of the array (1, 11, 21, 31a, 31b) from border column to border column and at each turning point connects two field elements ($F_{(i+1)j}$, F_{ij}) from the same border column and two successive rows, and

15   e)   any given access line (A_l) and any given secondary line (D_k) in each case together make contact with precisely one field element (F_{ij}).

3.   A device as claimed in claim 1, characterized in that the field elements (F_{ij}) are sensors, in particular detector elements for X-radiation, signal-emitting elements, in

20   particular pixels of a display, memory cells and/or actuators.

4.   A device as claimed in claim 2, characterized in that the access lines (A_l) and the secondary lines (D_k) serve to select the addressing of individual field elements (F_{ij}).

25   5.   A device as claimed in claim 2, characterized in that the secondary lines (D_k) serve to read data from field elements (F_{ij}) which can be selected via an access line (A_l).

6.   A device as claimed in claim 2, characterized in that the access lines (A_l) and
the secondary lines (D_k) are in each case connected to a driver circuit (2, 12, 22, 32a, 32b; 3,
23, 33), where the driver circuits are provided at the same border or at opposite borders of the
array (1, 11, 21, 31a, 31b).

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7.   A device as claimed in claim 1, characterized in that it has a second set of
access lines (A_l'), which access lines pass through the array (31a) of field elements in the
column direction without making contact with field elements.

10   8.   A device as claimed in claim 1, characterized in that the access lines (A_l, D_k)
run in a stepped manner along the diagonals.

9.   An electronic apparatus having an array of field elements (F_{ij}) arranged in
rows and columns in the form of a matrix, which apparatus is composed of devices (1, 11, 21,
15   31a, 31b) as claimed in claim 1.

10.   A method of accessing electronic field elements (F_{ij}) of an array (1, 11, 21,
31a, 31b) consisting of rows (i) and columns (j) in the form of a matrix, where access is in
each case made simultaneously to all field elements (F_{ij}) along a line which runs in zigzag
20   fashion along diagonals of the array (1, 11, 21, 31a, 31b) from border column to border
column and at each turning point connects two field elements from the same border column
and two successive rows.